Conoco Inc.
5801 Brighton Boulevard
Commerce City, CO 80022

September 20, 1995

Martha Wolf (8HWM-ER)
U.S. Environmental Protection Agency
999 18th Street, Suite 500
Denver, CO 80202-2405

Re: SPCC Number: C94003 Response

Dear Ms. Wolf,

As requested in your letter received on July 26, 1995, and follow-up phone message on September 8, 1995, enclosed please find a signed Statement of Correction and a copy of the modified section of the facility's SPCC plan. Conoco has modified Part V of the SPCC plan to include discussions on the alleged deficiencies. Conoco will be conducting a full review and evaluation of the SPCC plan in January 1996, to comply with the requirements of 40 CFR 112.5.

Modifications/additions to Part V addressing the deficiencies noted in your letter include:

DEFICIENCY: Master flow and drain valves kept locked.

Conoco modified Section B (Bulk Oil Storage Tanks) Drain Valves to read as follows:

Drain Valves

The diked storage areas have manual carbon steel valves for draining stormwater, which are routinely kept closed. Opening and closing of these drain valves is conducted by trained operators. Drain valves are inspected weekly by operations. The drainage from the dikes in the Main Plant flows into Finger Lake, which is discharged through permitted Outfall 002. The drainage from the dikes in the Asphalt Unit flows into the AU East Perimeter Concrete Drainage Channel, which can be discharged through permitted Outfall 004.

The drain valves are not locked because refinery security measures are adequate to prevent entry by unauthorized persons (refer to security procedures). In addition, these drain valves are for moving stormwater from the tank dikes, and are not directly connected to the tank. They are not required to be locked as they do not meet the definition in 112.7 (e) (9) (ii).

Tanks are equipped with manual carbon steel valves for draining water. These valves are opened by trained operators who monitor the water which is drained to sumps located within the tank dikes. The sumps are drained to the wastewater treatment system when full.

These valves are not locked as draining water from storage tanks is a continuous operation in the refinery.

These valves are considered to be in standby status. In addition, refinery security measures are adequate to prevent entry by unauthorized persons (refer to security procedures).

DEFICIENCY: Facility drainage - lift pumps for water treatment is not addressed.

Conoco modified Section A (Facility Drainage, Containment and Diversionary Structures) Asphalt Unit to include the following discussion on lift pump usage:

Stormwater and spilled liquids in non-diked non-process areas flow to the north end of the Asphalt Unit. Liquids aggregate to the AU East Perimeter Concrete Drainage Channel. This channel varies from 2 to 4 feet in height. The channel effluent flows into the AU Stormwater Basin. If a spill reached this channel, it could be contained in the channel by double block valves. There is also a berm located adjacent to Sand Creek which is designed to contain spilled liquids and stormwater. Stormwater can be tested, and if it meets permit standards, it may be discharged into Sand Creek via Outfall 004. Otherwise, the water is pumped to the Main Refinery WWTP via two permanently mounted lift pumps located in the basin.

Two permanently installed lift pumps are also located in the process sewer system downstream of oil/water separation. These pumps transfer water from the AU to the Main Refinery WWTP. As described thruout this section, there are containment structures to prevent water from reaching Sand Creek.

DEFICIENCY: Bulk storage tanks - use of internal heating coils is not addressed.

Conoco added to Section B (Bulk Oil Storage Tanks):

Internal Heating Coils

Tanks equipped with internal heating coils store either highly viscous liquids at ambient temperatures (asphalt), or are in water service. The refinery steam system is a closed system, recycling condensate back to the boilers for steam production. Blowdown from the steam system is treated in the wastewater treatment system before discharge.

DEFICIENCY: Bulk storage tanks - portable tanks properly positioned is not addressed.

Conoco added to Section B (Bulk Oil Storage Tanks):

Portable Storage Tanks

Conoco does not store any oil product or slop oil waste in portable storage tanks. All product and slop oil is stored in permanent tank structures contained in dikes.

DEFICIENCY: Security - master flow valves and starter controls locked is not addressed.

Flow/drain valves are addressed in the first deficiency sited. Conoco added to Section B (Bulk Oil Storage Tanks):

Oil Pump Starter Controls

The starter control for all oil pumps is located in the main plant's control room. As such, only authorized

personnel have access to the starter controls. This limited access meets the requirements of 40 CFR 112.7 (e) (9) (iii).

If you have any questions regarding the response to your Letter of Violation, please contact Bruce Schroer at 286-5720, or Alena Jonus at 286-5793.

Sincerely,

Jerry Heyd

att

Case Number: C94003

STATEMENT OF CORRECTION

I hereby certify under penalty of perjury (18 U.S.C. 1081) that all violations listed in the Letter of Deficiency dated have been corrected and that is now in compliance with all requirements of 40 CFR Part 112.

Jerry I. Heyd
Refinery Manager
Conoco Inc.

Owner's/Operator's Name

J I Heyd 9-21-95

Owner's/Operator's Signature Date

Conoco Denver Refinery

Facility

Sworn to and before me this
21st day of September, 1995

Carol A. Stitt

NOTARY PUBLIC

My Commission Expires July 6, 1998.

PART V
CONFORMANCE WITH APPLICABLE GUIDELINES

A. Facility Drainage, Containment and Diversionary Structures

The Denver Refinery is designed so that stormwater runoff and potential spills will be contained within the Refinery boundaries. All tanks and vessels are diked. In addition, there are several drainage channels. A list of the major Stormwater Basins and Drainage Channels are provided in Table III.

The Facility Drainage Diagram in Appendix B was developed to show the direction stormwater and spilled liquids will flow. Note that there are drainage channels which are capable of conveying liquids from one dike to another. There are also three concrete drainage channels which are designed to divert stormwater and spills into catchment basins. These concrete channels are inspected at regular intervals. If any impediments are discovered, they are removed.

Concrete curbing is provided around the process units where needed. Curbing is mainly located in low elevation areas where spilled oil may accumulate.

The Burlington Ditch retaining wall, located on the southwest side in the Main Refinery, prevents stormwater and spilled liquids from flowing off Refinery property. This wall is considered tertiary containment for both potential oil spills and stormwater runoff.

The Refinery owns various oil spill containment apparatus, like booms and absorbents, which are stored in the Main Warehouse and Chemical Warehouse. A complete list is provided in Appendix G. In the event of a major spill, outside resources can be obtained. Outside resources phone numbers and equipment are provided in Appendix K.

The two process areas are both equipped with oily water and stormwater sewer systems. In the event of an oil spill in a process area, the oil will typically flow into an oily water sewer system. The Asphalt and Reformer Units are equipped with segregated stormwater sewer systems.

A water and wastewater block flow diagram is provided in Appendix C. In an effort to improve wastewater effluent quality, a new activated sludge unit and three CPI oil/water separators were constructed and began operation in 1992.

The facility drainage, containment and diversionary structures for the Main Plant and the Asphalt Unit are discussed more thoroughly below.

Main Plant

The Main Plant is located west of Brighton Boulevard, south of Sand Creek, and northeast of Burlington Ditch (refer to Appendix B). It encompasses approximately 126 acres and contains a paved processing area, rail car and truck loading/unloading locations and storage tanks.

There is one retaining wall in the Main Plant, named the Burlington Ditch Concrete Retaining Wall, which provides tertiary containment for stormwater and/or spilled liquids. It's located at the southwest end of the Main Plant and runs along the Refinery property line adjacent to Burlington Ditch. In general, non-diked area oil spills south of 60th Avenue will flow south toward this retaining wall.

All of the large storage tanks in the Main Plant are provided with either individual dikes or group diking which are sufficiently impervious to contain the liquid in the tank. Drainage from diked storage areas is restrained by manually operated valves which are normally kept closed. When a significant amount of stormwater accumulates in the dikes, the valves are opened and the water flows from dike to dike until it eventually drains into either the Finger Lake Stormwater Basin or to a designated storage tank dike (refer to Appendix B). The water in Finger Lake is transferred to the Main Refinery wastewater treatment plant (WWTP) for treatment.

There are two concrete drainage channels in the Main Plant which are designed to contain stormwater and spilled oil. The Fire Training Ground Concrete Drainage Channel runs adjacent to 60th Avenue and drains into Finger Lake. Any oil accumulating in the channel or Finger Lake can be removed by vacuum trucks. The other concrete channel, the South Tank Farm Concrete Drainage Channel, is located along the Main Plant southeastern boundary adjacent to tanks number 71 and 75. Stormwater which enters this channel is routed to T-80 dike and transferred to the Main Refinery WWTP via Finger lake. Stormwater runoff from the Supply and Transportation Terminal property also flows in this channel.

The groundwater treatment system, located north of 60th avenue, is equipped with diking, curbing and containment isolation valves. All stormwater at this location is contained and treated through the groundwater treatment system. Spill material can be contained and transferred to the Main Refinery WWTP via vacuum trucks for treatment.

TABLE II

MAJOR CONTAINMENT & DIVERSIONARY STRUCTURES

NAME	LOCATION	TYPE OF CONTAINMENT	MATERIALS OF CONSTRUCTION & HEIGHT
Concrete Dikes	Tanks 20, 21, 52, 64, 70, 72, 86, 87, 96, 97, 116 & Wyco Pipeline Pump	Secondary	Concrete 8' High
Clay Dikes	Around Storage Tanks, Process tanks & Vessels	Secondary	Clay soils Height Varies
Concrete Spill Containment Walls	Tanks 13, 40, 49, 52, 56, 57, 59, 96, 97	Secondary & Tertiary	Concrete 2' High
Burlington Ditch Retaining Wall	Adjacent to Burlington Ditch	Tertiary	Concrete 2' Higher Than Finger Lake
Reformer Unit Curbing	Reformer Unit	Secondary	Concrete 6" High
Asphalt Unit Containment Dike	T-120 & T-121	Tertiary	Concrete 2' High
Asphalt Unit Gas Oil Unloading Pad & Sump	Asphalt Unit	Tertiary	Concrete 6" High
Man Sulfur Unit Curbing	Sulfur Plan	Tertiary	Concrete 6" High
Sweet Crude Unloading Pad	60th Avenue	Tertiary	Concrete 6" High
Wastewater Treatment System Dike	Main Plant Wastewater Treatment Storage Area	Secondary	Concrete 3' High
Groundwater treatment System Curbing	Adjacent to Sand Creek in Main Plant	Secondary	Concrete 6" High
Butane Bullet Spill Containment Pad	Main Plant	Secondary	Concrete 3' High
Vehicle Fueling Tanks Curbing	Main Plant	Secondary	Concrete 2' High
60th Avenue	Pipeline Unloading Pad	Secondary	Concrete 6" High

TABLE III

MAJOR STORMWATER BASINS & DRAINAGE CHANNELS

NAME	LOCATION	TYPE OF STRUCTURE	MATERIALS OF CONSTRUCTION
Finger Lake	Southwest Main Plant	Stormwater Diversion Basin	Concrete
Stormwater Diversion Box	From T-33 to Stormwater Diversion Box	Stormwater Diversion Basin	Concrete
Asphalt Unit Stormwater Effluent Basin	northeast Section of Asphalt Unit	Stormwater Diversion Basin	Concrete
Fire Training Ground Concrete Drainage Channel	Southwest Section of Main Plant	Stormwater Diversion Channel	Concrete
South Tank Farm Concrete Drainage Channel	Southeast Section of Main Plant	Stormwater Diversion Channel	Concrete
AU East Perimeter Concrete Drainage Channel	North East Section of Asphalt Unit, Drains into AU Stormwater Basin	Stormwater Diversion Channel	Concrete
T-94 Drainage Channel	From T-94 Dike to Finger Lake	Stormwater Diversion Channel	Pipe
T-33 Drainage Channel	From T-33 to Stormwater Diversion Box	Stormwater Diversion Channel	Pipe
T-71 Drainage Channel	From T-71 Dike to T-80 Dike	Stormwater Diversion Channel	Pipe
T-71 Drainage Channels	From T-62, T-64, T-65, T-66, T-70, T-72, T-74, T-96, T-97 & T-116 to T-94	Stormwater Diversion Channels	Pipe
T-94 Drainage Channels	From T-1, T-34, T-55, T-67, T-73, T-77, T-78 to T-94	Stormwater Diversion Channels	Pipe
T-33 Drainage channels	From T-2, T-3, T-38, T-52, T-58 to T-33	Stormwater Diversion Channel	Pipe
Asphalt Unit Stormwater Basing	From T-112, T-140, T-141, T-142, T-143, T-144, T-145, T-146, T-147, T-191, T-192, T-193, T-194 to Asphalt Stormwater Basin	Stormwater Diversion Channels	Concrete & Pipe
Reformer Storm Sewer	Reformer Unit	Stormwater Diversion Channel	Concrete & Pipe

Asphalt Unit

The Asphalt Unit (AU) is located east of the Union Pacific Tracks and south of Sand Creek. It encompasses approximately 34 acres. There is one process area, one rail car loading/unloading rack, two truck loading racks, and a storage tank area.

All storage tanks are diked, either individually or as a group. Drainage from diked storage areas are restrained by manual valves which are routinely kept closed. When a significant amount of stormwater aggregates in the dikes, the valves are opened and the water flows from dike to dike until it eventually flows to a low area near tank 145 (refer to Appendix B).

Stormwater and spilled liquids in non-diked non-process areas flow to the north end of the Asphalt Unit. Liquids aggregate to the AU East Perimeter Concrete Drainage Channel. This channel varies from 2 to 4 feet in height. The channel effluent flows into the AU Stormwater Basin. If a spill reached this channel, it could be contained in the channel by double block valves. There is also a berm located adjacent to Sand Creek which is designed to contain spilled liquids and stormwater. Stormwater can be tested, and if it meets permit standards, it may be discharged into Sand Creek via Outfall 004. Otherwise, the water is pumped to the Main Refinery WWTP via two permanently mounted lift pumps located in the basin.

Two permanently installed lift pumps are also located in the process sewer system downstream of oil/water separation. These pumps transfer water from the AU to the Main Refinery WWTP. As described thruout this section, there are containment structures to prevent water from reaching Sand Creek.

Stormwater and spilled liquids in the diked areas tends to flow toward tanks 145 and 146. Water which reaches this area is released via manual carbon steel valves (which are normally kept closed) to the AU East Perimeter Concrete Drainage Channel.

A concrete retaining wall is also located adjacent to the Union Pacific Railroad Tracks. It provides tertiary containment for stormwater and potential spills.

B. Bulk Oil Storage Tanks

Tank Inventory

The Denver Refinery currently operates storage and process tanks and towers which are included in Appendix E. All storage tanks are surrounded by either individual dikes or group diking for secondary containment. The dikes are designed to contain the entire contents of the tanks plus sufficient freeboard to allow for precipitation. They are also sufficiently impervious to contain spilled oil. Spills that occur around the tanks are contained within the dikes. If such a spill occurs, the liquid is hauled away by vacuum trucks and discharged into the Main Refinery WWTP.

Tank 60 has a concrete slab grooved foundation. in the event that a leak or spill occurs from this tank, the liquid would drain onto these grooves and become visible. If a leak or spill is detected in these grooves, the spill will be contained immediately (i.e., using vacuum trucks, etc.) and the tank will be repaired.

Inspections

Periodic integrity testing is performed on existing storage tanks using visual inspection of floors, roofs, and fittings and non-destructive ultrasonic testing of shells. Newly constructed tanks and tanks which have undergone extensive maintenance are hydrostatically and float tested. Storage tanks undergo a 5-year cycle for external inspection. Such testing is performed by or under the supervision of the Inspection Department of the Mechanical Division.

Materials and Construction

All the material and construction of the tanks is compatible with the material stored and the conditions for storage (i.e., temperature, pressure, etc.). Every tank is designed in accordance with Conoco Engineering Standards which specify minimum standards for such things as shell thickness, depending on the physical stress exerted on shell plates located at different spots on a tank. These standards have been derived from such national standards as API and ASTM. the ultrasonic testing records for a tank are kept permanently for comparison purposes until a tank is dismantled. The records are kept in the Inspection Department office.

Drain Valves

The diked storage areas have manual carbon steel valves for draining stormwater, which are routinely kept closed. Opening and closing of these drain valves is conducted by trained operators. Drain valves are inspected weekly by operations. The drainage from the dikes in the Main Plant flows into Finger Lake, which is discharged through permitted Outfall 002. The drainage from the dikes in the Asphalt Unit flows into the AU East Perimeter Concrete Drainage Channel, which can be discharged through permitted Outfall 004.

The drain valves are not locked because refinery security measures are adequate to prevent entry by unauthorized persons (refer to security procedures). In addition, these drain valves are for moving stormwater from the tank dikes, and are not directly

connected to the tank. They are not required to be locked as they do not meet the definition in 112.7 (e) (9) (ii).

Tanks are equipped with manual carbon steel valves for draining water. These valves are opened by trained operators who monitor the water which is drained to sumps located within the tank dikes. The sumps are drained to the wastewater treatment system when full.

These valves are not locked as draining water from storage tanks is a continuous operation in the refinery. These valves are considered to be in standby status. In addition, refinery security measures are adequate to prevent entry by unauthorized persons (refer to security procedures).

Internal Heating Coils

Tanks equipped with internal heating coils store either highly viscous liquids at ambient temperatures (asphalt), or are in water service. The refinery steam system is a closed system, recycling condensate back to the boilers for steam production. Blowdown from the steam system is treated in the wastewater treatment system before discharge.

Portable Storage Tanks

Conoco does not store any oil product or slop oil waste in portable storage tanks. All product and slop oil is stored in permanent tank structures contained in dikes.

Oil Pump Starter Controls

The starter control for all oil pumps is located in the main plant's control room. As such, only authorized personnel have access to the starter controls. This limited access meets the requirements of 40 CFR 112.7 (e) (9) (iii).

Tank Upgrades

It is important to note that this Refinery is currently rebuilding and upgrading its storage tanks. As tanks become available, they are scheduled to be upgraded. Existing tanks that are in structurally sound condition will have a new "double-layer bottom" installed (refer to Appendix I). Any tank which is not structurally sound will be either repaired or dismantled. All new tanks being built will have a double-layer bottom (refer to Appendix I) except for resid tanks. This work is being performed to decrease the risk of leakage and to ensure that future needs for supply and product storage are effectively served in an environmentally sound manner. This continuous tanks upgrade make it difficult to accurately count the number of storage tanks in service at one specific time. A complete compilation of storage tank data and other refinery vessels was assembled at the time this SPCC plan was written (refer to Appendix E).

C. Facility Transfer Operations

All product transfer operations are performed by trained personnel. Pumps, valves and aboveground piping are inspected during a transfer to prevent an undetected leak event. Continuous coordination is maintained with the pipeline companies that transport our crude oil and products. Tank levels are monitored by high level alarms during transfer for prevention of overfilling.

Protective wrapping, coating and cathodic protection are provided (if soil conditions warrant) for buried piping. Terminal connections of lines not in service are either capped or blind-flanged. The pipe supports are designed to allow for expansion and contraction and minimize abrasion and corrosion.

Regular inspections of flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces are conducted. Periodic pressure testing is also conducted (when warranted) on piping in areas where facility drainage is such that a failure might lead to a spill.

New drivers of vehicles granted entry into the plant are verbally warned of aboveground piping. Overhead pipe crossings of roadways are clearly marked for clearance. Signs are clearly posted at all places where overhead clearance is limited. Trucks are properly grounded before loading begins. The driver must be present when transferring is underway. A careful watch must be maintained to prevent overfilling.

D. Facility Rail Tank Car and Tank Truck Loading/Unloading Racks

The procedure used to load and unload rail cars and tank trucks follow industry operating practices and meet the requirements and regulations of the U.S. Department of Transportation (49 CFR 173.31, 174.67 and 174.300 for rail tank cars and 40 CFR 177.834 and 177.837 for tank trucks). Spills from the loading/unloading racks are either reclaimed on site or disposed of in an industrial landfill.

The Refinery maintains an "Oil Movement Division" Operating Manual. Trained operators are familiar with this manual and use it as a reference in all loading/unloading areas. This manual is not included in the SPCC Plan Appendix because it is too voluminous.

The loading/unloading areas are designed to contain at least the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded in the plant. They are equipped with curbing and drains as secondary containment. In the event that a spill leaves a loading/unloading area, it will be contained by tertiary containment structures (i.e. drainage channels, retaining walls) in the Refinery (refer to Appendix B). Operators are trained to inspect hoses and connections before the truck is moved. A warning system or physical barrier system is used to prevent vehicle departure prior to disconnection of lines.

Drain valves are inspected to insure they are closed before loading commences. Trucks and tank cars are inspected before and after loading for problems and correct DOT hazard class placards are furnished if needed. The lowermost drain in the tank car/truck is examined for leakage prior to filling and departure.

E. Inspections and Records

There are two main classes of inspections: (1) formal physical inspections for which records are kept permanently or for a fixed period of time and (2) routine inspections by operators for which records are not required.

Permanent/Long-Term Records

Storage Tanks

Periodic integrity testing is performed on storage tanks using visual inspection of floors, roofs, and fittings; non-destructive ultrasonic testing of shells; and hydrostatic and float testing of new construction or tanks having undergone extensive maintenance. External inspections are performed every 5 years. All tanks are visually inspected yearly also. Such testing is performed by or under the supervision of the Inspection Department.

All the material and construction of the tanks is compatible with the material stored and the conditions for storage (i.e., temperature, pressure, etc.). Every tank is designed in accordance with Conoco Engineering Standards which specify minimum standards for such things as shell thickness depending on the physical stress exerted on shell plates located at different spots on a tank. These standards have been derived from such national standards as API, ASTM, etc. The ultrasonic testing records for a tank are kept permanently for comparison purposes until a tank is dismantled. Secondary tank bottoms are also inspected periodically. When a tank is taken out of service, opened, and cleaned for maintenance or operational reasons, thorough interior inspection of shells, roofs, fittings, floors, and foundations are made. Repairs are made as necessary. All records are kept in the Inspection Department office.

Pipelines

Conoco's buried pipelines are wrapped and coated for corrosion protection. When a section of buried line is exposed for any reason, it is carefully examined for deterioration and repaired as needed. There is an ongoing program to replace buried lines with above-ground piping. All refinery aboveground transfer lines are inspected yearly for leaks and pipe integrity. Such inspection records are kept by the Inspection Department.

Stormwater Runoff

Uncontaminated stormwater runoff water is tested for pH, Oil and Grease, and total organic carbon during each discharge. This is performed in accordance with the NPDES Permit for Outfall 004. Test results are reported to the U.S. EPA and the Colorado Department of Health. The data is kept at the Refinery for a minimum of three years.

Routine Operator Inspections

Routine daily inspections are carried out by the respective operators, each on an 8-hour shift. With respect to tanks, the following items are checked. The outside of the tank is frequently observed for signs of deterioration, leaks, or accumulating oil inside the dike. Dikes are checked for signs of erosion or leaks. Written instructions are posted in the pump house for determining when dike drains may be opened to drain the water out. Log

sheets are maintained for a minimum of three years. Past data can be retrieved if necessary. If oil is found anywhere in the Refinery, it will be removed by a vacuum truck and hauled to the wastewater treatment system. All permitted outfalls are inspected on a daily basis.

During oil transfer operations inspections are made of all the above ground valves, joints, pumps, and pipe runs. General condition is assessed and possible leaks are looked for. If an oil leak is observed, it's reported. The necessary steps are immediately taken to stop the leak and to collect all liquids with a vacuum truck. If repairs to pumps or other equipment are seen to be needed, work orders are written for the necessary maintenance. Drainage ditches are inspected routinely for any oil that may have escaped from small leaks.

During tank car and truck loading, inspections are made to insure drain valves are properly closed before filling and before movement from the rack. Checks are made to ensure proper hatch closure, valve closing, and disconnection of hoses. Drains are checked to avoid plugging.

F. Security

The Denver Refinery has several security measures which minimize the possibility for unauthorized entry onto the facility. These measures include:

- 24-hour per day surveillance by security guards
- Fencing around the entire facility
- Controlled visitor access through the guardhouse
- Good lighting in Refinery area
- Internal telephone system
- Two-way radio system
- TV monitoring system

During normal business hours (7:30 a.m. - 4:00 p.m.), one guard is on duty at each gate. The refinery operates three gates. They are named the Main, Asphalt, and the North gates. Each gate is attended 24 hours a day, 7 days a week by security personnel. The security guards at entry points into the Refinery prevent unauthorized entry onto the Refinery property.

The entire Refinery facility is enclosed by a structurally sound fence. It is comprised of a chain-link fence at least six-feet high with three strands of barbed wire at the top. This perimeter fencing is patrolled and inspected on a weekly basis by the security personnel.

Visitor Access

Visitor access to the Refinery is controlled by requiring all visitors to register at the Main Gate guardhouse, stating name, company represented or reason for visit, individual intending to visit, and information about the vehicle entering, if applicable. The person being visited must give approval to the gate guard before the visitor may enter. The contractors move in and out of the Refinery through the Contractor's (North) Gate. Visitors are normally allowed in the Refinery only during the business hours.

Lightning

Lighting is provided in the Refinery area. This enhances the security of the facility at night. Non-operating personnel are normally not present at neither the Main Plant nor the AU at night. The possibility of vandalism is considered remote due to the security measures.

Telephone

The telephone system is set up as both an internal and external system. Telephones are located in virtually all buildings throughout the Refinery. These telephones may be used to call within the complex by the use of a four-digit number, as well as outside the complex by the use of an seven-digit number. Emergency phone numbers and pager numbers are located in Appendices J and K.

Radio System

The two-way radio system is used in the Refinery as a portable means of communication not dependent on an external electric power source. All guards, unit control rooms, pumpers, and night operators have access tot he radios and are familiar with their use.

Television Monitors

A television monitoring system is provided at the Asphalt North and South Gates. This system allows remote monitoring of the vehicles in the Asphalt Unit.

G. Personnel Training and Spill Prevention Procedures

Intensive personnel training is a key factor in decreasing the likelihood of a spill. All the Refinery employees are required to complete the Denver Refinery training program.

All Refinery employees must attend an internally instructed eight-hour Environmental and Safety Training Class annually. This annual class includes a training session focusing on safety, environmental concerns and the SPCC Plan regulations are discussed. Employees involved in the SPCC Plan requirements continue to receive on-the-job training (OJT) for site-specific instruction on the actual units, duties, and functions with which they must deal. Precise site-specific application of procedures for spill prevention, emergency response, and spill mitigation are taught in OJT and in periodic safety meetings.

Each new permanent employee in Refinery Operations is required to receive three days of site-specific training. This consists of an orientation, issue of safety equipment, and classes on general eye and hearing safety in four hours followed by a full day of respirator and fire safety training. Environmental engineers, emergency response team members and vacuum truck operators all undergo HAZWOPER training.

The Refinery manager is designated as the person accountable for oil spill prevention and he reports directly to line management.

A summary of the training that Refinery personnel receive is provided on the following two pages.

SOLID AND HAZARDOUS WASTES

TRAINING

The following details the training program developed for employees who handle solid and hazardous wastes. A copy of topics presented for the environmental health and safety 40 hour OSHA class is attached.

Description

The introductory training shall enable employees to perform their assigned duties and functions in a safe and healthful manner so as not to endanger themselves or other employees.

This training program has been specifically designed to incorporate the requirements of 29 CFR 1910.120, 40 CFR 265.16, and 6 CCR 1007-3 Part 265.16.

Outline

A minimum of 24 hours of training on Hazardous Waste Operations shall be offered tot he following employees

Environmental Director
Environmental Staff - RCRA, Water, and Waste Management Coordinators
Refinery Coordinator - Environmental
Environmental Operators
Equipment Operators
Fluor Daniel Utility Foreman
Fluor Daniel Utility Personnel
Equipment Operators

A minimum of 24 hours of training on Emergency Response shall be offered to the following employees:

Safety Director
Refinery Supervisors

Design

The training shall consist of classroom and field instruction. This instruction will include the general theory as well as specific site application of hazardous waste operation and emergency response.

Continuing Training Program

Description

Continuing or refresher training shall review general hazardous waste operation and emergency response principles and practices as well as an update on new or revised operating procedures and regulations.

This training, in the same manner as the initial training, has been specifically designed to incorporate the requirement of 29 CFR 1910.120, 40 CFR 265.16, and 6 CCR 1007-3 Part 265.16

Outline

A minimum of 4 hours of training on Hazardous Waste Operations shall be offered to the following employees:

Environmental Director
Environmental Stall - RCRA, Water, and Waste Management Coordinators
Refinery Coordinator - Environmental
Environmental Operators
Equipment Operators
Fluor Daniel Utility Foreman
Fluor Daniel Utility Personnel
Equipment Operators

A minimum of 4 hours of training on Emergency Response shall be offered to the following employees:

Refinery Manager
Process Superintendent
Mechanical Superintendent
Environmental Director
Safety Director
Refinery Supervisors
Fire Brigade

H. Oil Spill Emergency Procedures

There are basically two sizes of oil spills that the Refinery is concerned with. The first is a minor spill. A minor spill is one that has the potential for minimal impact and can be contained and remediated using normal routine cleanup procedures. The second type of spill is a major spill. A major spill is one that can not be contained using normal routine cleanup procedures due to a large volume of liquid. A major spill has the potential to flow off the Refinery boundary.

In the unlikely event of a oil spill, proper procedures must be followed. First consider the safety procedure below. Then consult the **Refinery Incident Response Guide for Liquid Spills on pages 20-21.** It outlines the correct procedure to follow if an oil spill occurs. Also, consult the Refinery Emergency response Plan (Appendix F). It specifically outlines each employee's individual duties during a spill event (pages 14 - 17). Refinery personnel should also become familiar with the Oil Spill Control Techniques in Appendix H. If an oil spill reaches navigable waters (Sand Creek or Burlington Ditch), the two downstream water users (within 5 miles downstream) should be contacted immediately. They are listed in a memorandum on pages 5 and 6 in Appendix K.

It is mandatory that the Safety Procedures below be followed for both types of spills.

Safety Procedures

Prior to implementing incident response procedures, it is imperative that safety considerations are addressed. Always take time to first size up the situation. Ask these types of questions.

1. Is the situation immediately threatening to my life or other lives? Is my safety in jeopardy?

2. Is here a potential for the situation to become life threatening? Is future safety in jeopardy?

3. Is the situation growing and at what approximate rate?

4. Is there a problem with vapors in the air because of the spill? Would I be safe breathing it? Note wind direction, think of potential if wind changes.

5. Is the spilled material a problem if it is contacted on your skin or eyes?

6. Are the materials flammable and where are the potential ignition sources?

Several people may need to be consulted to answer these questions. The Unit Chief Operator should be knowledgeable with the safety considerations as well as the Refinery Supervisor. If the situation is serious, the Emergency Response Plan in Appendix F should be activated immediately.

After safety has been considered, then initiate the incident Response Guide on the following three pages.